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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,108	10/05/2005	Hans-Kervin Bruins	GIL-16108	3576
7609 7590 03/17/2009 RANKIN, HILL & CLARK LLP 925 EUCLID AVENUE, SUITE 700 CLEVELAND, OH 44115-1405			EXAMINER SOROUSH, ALI	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 03/17/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/535,108	<b>Applicant(s)</b> BRUINS ET AL.	
	<b>Examiner</b> ALI SOROUGH	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is **non-final**.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-41 and 43-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/10/2008 has been entered.

### ***Status of the Claims***

Claims 28, 42 and 45 are currently amended and claims 1-27, 42, and 46-52 are cancelled. Therefore, claims 28-41 and 43-45 are currently pending examination for patentability.

Rejections and/or objections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

### ***New Grounds of Rejection***

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 28, 30, and 40 recite the broad recitation arthropods, and the claims also recite ticks and mites which is the narrower statement of the range/limitation.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat.

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App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 41 recites the broad recitation wherein the arthropods are lymph- or bloodsucking insects and/or skin penetrating arthropods, and the claim also recites ticks in mites in independent claim 28, which 41 is dependent on, which is the narrower statement of the range/limitation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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1. Claims 28, 29, 31-33, 36-41, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uick (US Patent 5716602 Published 02/10/1998) in view of Abivardi (Iranian Entomology an Introduction – Applied Entomology Volumne 2, Published 2001) as evidenced by Bledock et al. (US Patent 5648398, Published 07/15/1997) .

***Applicant Claims***

Applicant claims a method of repelling arthropods comprising applying to a product, area, and or surface a repellent composition comprising at least one portion of the plant Vitex agnus-castus.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

Uick teach an insect repellent sunscreen comprising DEET, octyl methoxycinnamate, fragrance, emulsifiers, and water which can be applied onto human skin and then rubbed on and spread out over the skin for protection outdoors against annoyance by pests and the harmful effects of UV rays. (See title, column 1, Lines 11-19, column 5, Table of example compositions, and column 6, Lines 51-54).

***Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)***

Uick. lacks a teaching wherein the repellent composition comprises a portion or extract of the plant Vitex agnus-castus. This deficiency is cured by the teachings of Abivardi.

Abivardi teach a composition of pine seed with leaves of Vitex agnus castus that can be cooked in olive oil and rubbed onto the entire body as a repellent against insects and other injurious animals. (See page 488, Lines 1-19). Furthermore, Abivardi teach

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that the leaves of *Vitex agnus castus* can be scattered in the house including on the floors in order to repel insects or vermin by their smoke and/or odor. (See page 489, Lines 11-21 and page 523, Lines 16-19).

Bledcok et al teach insect repellent lotions and sprays comprising DEET is effective against Lyme disease ticks. (See title and column 1, Lines 20-53).

***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the leaves of *Vitex agnus-castus* as an insect repellent to the composition of Uick, as suggested by Abivardi and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Abivardi teaches that the leaves of *Vitex agnus castus* act as an insect repellent. Therefore, it would have been obvious to one of ordinary skill in the art to use the leaves of *Vitex agnus-castus* as an insect repellent to be added to the composition taught by Uick in order to enhance the insect repellency activity of the composition.

It is the Examiners position that a composition comprising DEET would necessarily act as a repellent against ticks. This is substantiated by the teachings of Bledock et al.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

2. Claims 30, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uick (US Patent 5716602 Published 02/10/1998) in view of Abivardi (Iranian Entomology an Introduction – Applied Entomology Volume 2, Published 2001) further in view of Blum et al. (US Patent 5885600, Published 03/23/1999) as evidenced by Bledock et al. (US Patent 5648398, Published 07/15/1997) .

***Applicant Claims***

Applicant claims a method of repelling arthropods comprising applying to a product, area, and or surface a repellent composition comprising at least one portion of the plant *Vitex agnus-castus*.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The combined teachings of Uick and Abivardi is disclosed above.

***Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)***

Uick. and Abivardi lack a teaching wherein the repellent composition comprises a antioxidant. This deficiency is cured by the teachings of Blum et al.

Blum et al. teach, "Insect repellents have been used for centuries to prevent insects from annoying humans and animals alike. Repellents have also been used to prevent insect harm to such items as food, clothing, and furniture." (See column 1, Lines



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15-19). "A composition that has insect repellent properties is made from cold processed extracted oils and an antioxidant ..." (See abstract). The composition may further comprises a solvent, UV absorber or stabilizer, and antioxidants (such as butylated hydroxytoluene and ascorbyl palmitate). (See columns 7-8, claims 1-17). "The resultant composition may then be formulated into many different items, such as lotions, sprays, and creams for use on humans, animals and vegetation." (See column 2, Lines 49-51). "The various compositions work effectively against arachnids (spiders, ticks, mites), caterpillars, cockroaches, silver fish, moths, slugs, bees, yellow jackets, beetles, aphid, meals bugs, green flies, horse flies, gnats, mosquitoes, and chiggers." (See column 6, Lines 19-23).

***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add antioxidants to the composition of Uick , as suggested by Blum et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Blum et al. teach that insect repellent compositions can comprise antioxidants. Therefore, it would have been obvious to one of ordinary skill in the art to use the antioxidants butylated hydroxytoluene and ascorbyl palmitate to be added to the composition taught by Uick in order to add antioxidant functionality to the composition.

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In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush  
Patent Examiner  
Art Unit: 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616